



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,848	12/17/2003	Carl Joseph Kraenzel	042846-0312967	5441
53796 7590 05/07/2009 PILLSBURY WINTHROP SHAW PITTMAN, LLP c/o SUSAN TRADER 1650 TYSONS BOULEVARD P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER MADAMBA, GLENFORD J				
ART UNIT 2451		PAPER NUMBER		
MAIL DATE 05/07/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/736,848

**Applicant(s)**

KRAENZEL, CARL JOSEPH

**Examiner**

Glenford Madamba

**Art Unit**

2451

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-33, 35, 36, 38, 41-56 and 58-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-33, 35-36, 38, 41-56, and 58-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to remarks filed by Applicant's representative on February 26, 2009.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 26, 2009 has been entered.

#### ***Response to Amendments and Remarks***

2. With respect to Applicant's latest submission, the Office has given full consideration to the claim amendments filed on April 17, 2008, but are now considered moot in light of the following grounds of rejection provided for the current / amended set of claims.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 29, 30, 35, 36, 38, 41-49, 52-56, 58-61, 63, 65-74, 77-85 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al (hereinafter Bode), U.S. Patent US 7,206,778 in further view of Beck et al (hereinafter Beck), U.S. Patent US 6,718,366 B2.

As per claims 29 and 65, Bode (in view of Beck) discloses in a system comprising a network, a server connected to a network and hosting an information module (content provider server 100) [Fig. 1], a first interface to a communications link (130) for connecting the server to a remote client (user 105), and a second interface for connecting the server to at least one data source (knowledge containers 201 / 202) [Fig. 2]. Bode also discloses a method for monitoring a communication between human individuals and retrieving information relevant to the communication between individuals and retrieving information relevant to the communication [Abstract], the method

comprising: automatically filtering one or more topic words appearing in the monitored communication that define a context or one or more key topics of the communication (filter / lexical taxonomies) [col 5, L6-15]; and automatically searching the at least one data source using the one or more topic words to generate search results for information relevant to the context or the one or more key topics of the communication (Search Engine 410) [Figs 4 & 5]; and automatically providing the search results to said user (e.g., search results returned) [Abstract].

However, with regards to the claim, while Bode discloses substantial features of the invention, as above, the additionally recited features of automatically monitoring, via the first interface, a communication *between a user associated with the remote client and at least one other individual*; and automatically filtering, searching and providing results “in real-time during the communication” are disclosed by Beck.

Beck, in a related field of endeavor, discloses as his invention a method and apparatus for providing media-independent self-help modules within a multimedia communication-center customer interface [Abstract] [Fig. 1 & 2]. Specifically, Beck discloses the additionally recited features of a automatically monitoring, via the first interface, a communication *between a user associated with the remote client and at least one other individual* (Beck: e.g., “monitoring client activity”) [Abstract] (e.g., via ‘Interaction Monitor 331) [Fig. 16] (e.g., (e.g., for completing ‘live transactions’ between a customer and an agent / service person / knowledge worker / business partners, for example) [col 13, L43-48] [col 14, L6-18] [col 45, L59 – col 46, L20]. Beck also expressly discloses the recited feature of automatically filtering, searching and providing

results "in real-time during the communication" (Beck: e.g., "accessing and 'monitoring' live data {dialog} and creating 'dialog associations' from data stored with additional dialogs being added to the association in '*real-time*' as they occur with respect to live interactions") [col 46, L25-43].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine and/or modify Bode's invention with the above said additional recited features, as disclosed by Beck, for the motivation of providing a media-independent self-help wizard that is accessible and executable from within a customer-interfacing WEB-form or customer-interfacing window that is programmable according to enterprise rules and objectives [Beck: col 5, L28-50].

As per claim 30, Bode discloses the system of claim 29, further comprising outputting the search results to the remote client (Result Ranking Engine 415) [Figs. 4 & 5].

As per claim 35, Bode discloses the system of claim 29, wherein the remote client comprises at least one of a personal computer, personal digital assistant, or a wireless terminal device (PC or PDA) [col 25, L35-42].

As per claim 36, Bode discloses the system of claim 1, wherein the at least one data source comprises at least one database (content base 115) [col 24, L10-13] or knowledge management (KM) repository (Knowledge Corpus 425) [Fig. 4].

As per claim 38, Bode discloses the system of claim 1, wherein the information module comprises an Internet web site (e.g. website) [{0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64] or software application (i.e., software) [col 24, L10-13] (e.g., CRM application) [col 1, L61] .

As per claims 41 and 66, Bode discloses the system of claim 29, wherein the monitoring step further comprises receiving the communication as input in real time (i.e., real-time timer) [col 10, L45-55].

As per claims 42 and 67, Bode discloses the system of claim 29, wherein the communication comprises at least one text message (text communication 201) [Fig. 3].

As per claims 43 and 68, Bode discloses the system of claim 42, wherein the at least one text message comprises an electronic mail message (email communication 201) [Fig. 3].

As per claims 44 and 69, Bode discloses the system of claim 42, wherein the at least one text message comprises a plurality of text messages comprising a web chat ("dialogs" on the web) [Figs. 11-13, 15-17, 19 and 21] & {0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 45 and 70, Bode discloses the system of claim 29, wherein the communication comprises a voice communication (e.g. telephone call) [col 1, L36].

As per claim 46 and 71, Bode discloses the system of claim 45, wherein the voice communication comprises at least one of a telephone conference, or live conversation (e.g. Internet based-telephone videoconferencing) [col 5, L29-35].

As per claims 47 and 72, Bode discloses the system of claim 45, wherein the monitoring module receives the voice communication as input in real time and converts it to text [{Abstract} {0015} (IVR / text to speech system) {0184} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 48 and 73, Bode discloses the system of claim 29, wherein the topic filter module filters one or more topic words appearing in the communication using a weighted averaging algorithm (e.g., term-extraction algorithm with weighted tags 202) [Fig. 12] [col 2, L47-49].

As per claims 49 and 74, Bode discloses the system of claim 48, wherein the topic filter module ("topic spotter") [col 6, L39] applies the weighted averaging algorithm to the communication at a predetermined frequency (e.g., term-extraction algorithm with



weighted tags 202) [Fig. 12] [col 2, L47-49].

As per claims 52 and 77, Bode discloses the system of claim 29, wherein providing search results to said user comprises hypertext links to the search results, so that the user associated with the remote client may select the hypertext links to access the search results (email response including hyperlinks) [col 6, L60].

As per claims 53 and 78, Bode discloses the system of claim 29, wherein the information module further comprises a customization module for enabling a user associated with the remote client to specify one or more parameters (search strategy 910 / preferences) [col 19, L35-65] [Fig. 9].

As per claims 54 and 79, Bode discloses the system of claim 53, wherein the user may specify the types of communication to be monitored (e.g., email, Internet based-telephone videoconferencing, text message) [col 5, L29-35].

As per claims 55 and 80, Bode discloses the system of claim 53, wherein the user may specify the at least one data source to be searched [{0179} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

As per claims 56 and 81, Bode discloses the system of claim 53, further comprising enabling the user to specify the format of the search results [Figs. 11-13, 15-17, 19 and

21] & {0178} of Pat. Application 09/798964, incorporated by reference] [col 3, L42-64].

3. Claims 58-61, 63, 82-85 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode et al (hereinafter Bode), U.S. Patent US 7,206,778, in view of Beck et al (hereinafter Beck), U.S. Patent US 6,718,366 B2 and in further view of Fratkina et al (hereinafter Fratkina), U.S. Patent Publication US 2001/0049688 A1.

As per claims 58 and 82, while the combination of Bode and Beck discloses substantial features of the invention, as above, the additionally recited feature of the method wherein information relevant to the context or one or more key topics of the communication comprises one or more knowledge reports by experts, documents, or other resources associated with a context or one or more key topics of the communication" is disclosed by Fratkina.

Fratkina, which is "incorporated by reference" by Bode and in a related endeavor, discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said feature of the method of claim 29, wherein information relevant to the context or one or more key topics of the communication comprises one or more knowledge reports by experts, documents, or other resources associated with a context or one or more key

topics of the communication [Fratkina: col 15, L6-35] [col 5, L7 – col 6, L5] (e.g., Topic Spotter) [col 6, L25-58].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Bode and Beck with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like interaction between a person and a computer or other device to refine and satisfy the person's request for information [0005].

As per claims 59 and 83, while the combination of Bode and Beck discloses substantial features of the invention, as above, the additionally recited feature of the method wherein providing search results to said user comprises providing full text or a brief synopsis of each search result is disclosed by Fratkina.

Fratkina, which is "incorporated by reference" by Bode and in a related endeavor, discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said feature of the method wherein providing search results to said user comprises providing full text or a brief synopsis of each search result (Fratkina: e.g., Search Results R1-R3) [Fig. 4] [col 7, L48 – col 8, L28].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Bode and Beck with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like interaction between a person and a computer or other device to refine and satisfy the person's request for information [Fratkina: 0005].

As per claims 60 and 84, while the combination of Bode and Beck discloses substantial features of the invention, as above, the additionally recited feature of the method further comprising providing the user with the one or more topic words that were searched is disclosed by Fratkina.

Fratkina, which is "incorporated by reference" by Bode and in a related endeavor, discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said feature of the method discloses the method further comprising providing the user with the one or more topic words that were searched [Fratkina: Table 3] [col 11, L50-67].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Bode and Beck with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like interaction between a person and a computer or other device to refine and satisfy the person's request for information [Fratkina: 0005].

As per claims 61 and 85, while the combination of Bode and Beck discloses substantial features of the invention, as above, the additionally recited feature of the method wherein providing search results comprises one or more of sending the search results in an electronic mail message; presenting the search results on a designated intranet or Internet site; displaying the search results in a pop-up window on a display device; or presenting the search results to at least one other individual is disclosed by Fratkina.

Fratkina, which is "incorporated by reference" by Bode and in a related endeavor, discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said feature of the method wherein providing search results comprises one or more of: sending the search results in an electronic mail message; presenting the search results on a designated intranet or Internet site; displaying the search results in a pop-up window on a display device; or presenting the search results to at least one other individual (Fratkina: e.g., CRM sends a reply email to user 105) [col 6, L35-67].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Bode and Beck with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like

interaction between a person and a computer or other device to refine and satisfy the person's request for information [Fratkina: 0005].

As per claims 63 and 87, while the combination of Bode and Beck discloses substantial features of the invention, as above, the additionally recited feature of the method wherein the filtering comprises filtering by activity context, user context, taxonomy-parent or synonym word look-up, involved-participant context, or topical urgency context is disclosed by Fratkina.

Fratkina, which is "incorporated by reference" by Bode and in a related endeavor, discloses as his invention a method and system for retrieving information through the use of a multi-stage interaction with a client to identify particular knowledge content associated with a knowledge map. Specifically, Fratkina discloses the above said feature of the method wherein the filtering comprises filtering by activity context, user context, taxonomy-parent or synonym word look-up, involved-participant context, or topical urgency context (Fratkina: e.g., filter taxonomies) [col 5, L10] [Tables 1-3].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combined invention of Bode and Beck with the above said feature, as disclosed by Fratkina, for the motivation of providing a multi-step conversation-like interaction between a person and a computer or other device to refine and satisfy the person's request for information [Fratkina: 0005].

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Beck and Teng et al (hereinafter Teng), U.S. Patent 6,976,018.

As per claim 32, while the combination of Bode and Beck discloses substantial features of the invention such as a system for monitoring a communication and retrieving information relevant to the communication [Abstract], the additional feature of the system wherein the network comprises at least one of the Internet, an intranet or a virtual private network is disclosed by Teng..

Teng, in a related endeavor, discloses as his invention a method that queries a plurality of search engines for properties to identify for which content categories the search engines are suited. A query to locate content is communicated to those of the plurality of search engines suited to service the query to locate content, based on at least one content category of the query to locate content [Abstract] [Figs. 1-3]. In particular, Teng discloses the added feature of the system wherein the network comprises at least one of the Internet, an intranet or a virtual private network (Teng: e.g., internet) [col 1, L15].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Beck with the above additional feature of the system wherein the network comprises at least one of an intranet or a virtual private network, as disclosed by Teng, for the motivation of providing search options

that enables the selection of the best available search technology for a particular search query, as well as providing for flexibility [Teng: col 1, L35-42].

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Beck and in further view of Burdick et al (hereinafter Burdick), U.S. Patent 7,185,001.

As per claim 33, while the combination of Bode and Beck discloses substantial features of the invention such as a system for monitoring a communication and retrieving information relevant to the communication [Abstract], as above, the added feature of the system wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an integrated services digital network (ISDN) line, or an analog modem connection is disclosed by Burdick.

Burdick, in a related endeavor, discloses as his invention an interactive document search, retrieval, categorization, and summarization method and system [Abstract] [Fig. 1]. The invention retrieves relevant documents from a computer network in response to a user's query and organizing the retrieved document into categories [col 1, L10-17]. In particular, Burdick discloses the added feature of the system wherein the communications link comprises at least one of a digital subscriber line (DSL) connection, a digital data services (DDS) connection, an Ethernet connection, an



integrated services digital network (ISDN) line, or an analog modem connection [col 6, L30-44] [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Beck with the above additional feature, as disclosed by Burdick, for the motivation of providing a system and method for interactively searching, retrieving, categorizing, and summarizing documents, and for minimizing the opening, closing, and reading of documents [Burdick: col 2, L24-29].

6. Claims 50, 51, 75 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Official Notice.

As per claims 50 and 51, Bode in view of Official Notice discloses the system of claim 48, further comprising a user associated with the remote client specifies the frequency.

With regards to the claims, Official Notice is taken in that it the specification of a frequency by a user associated with a remote client and/or designation of a default frequency by an information module of the system is would be obvious to one of ordinary skill in the art for applying an algorithm (e.g., term-extraction algorithm with weighted tags 202) [Fig. 12] [col 2, L47-49] to the module of the system at a particular rate and as part of the design in the monitoring of communication for searching and

retrieving documents and other content using search engines and a knowledge database (knowledge containers 201 / 202) [Fig. 2].

As support for the assertion of obviousness in view of what is known in the art, the Office additionally remarks that, upon a closer examination of the full teachings by Bode, the feature of the system wherein a user specifies a frequency or wherein a default frequency is designated is actually expressly disclosed by the Bode prior art reference (e.g. Algorithmic implementation for searching a specified/selected n-dimensional search matrix) [col 15, L46 – col 16, L37] [Fig. 8] or, alternatively, the Burdick prior art reference (e.g., iterative reclustering / recategorization or Search refinement) [col 9, L33 – col 10, L50] [Fig. 1].

7. Claims 62, 64, 86 and 88, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bode in view of Beck and in further view of Liddy et al (hereinafter Liddy), U.S. Patent 5,873,056.

As per claims 62, 64, 86 and 88, while the combination of Bode and Beck discloses substantial features of the invention such as the system for monitoring a communication and retrieving information relevant to the communication, as above, the added feature of the system wherein the communications link comprises at least one of generating a topic vector comprising a list of several potential matches for a word, and refining the topic vector by comparing the topic vector with other topic vectors for a predetermined

time interval or number of characters to determine if they share a similar context or one or more key topics is disclosed by Liddy in a related endeavor.

Liddy discloses as his invention a natural language processing system that uses unformatted naturally occurring text and generates a subject vector representation of the text, which may be the entire document or a part thereof such as its title, a paragraph, a clause, or a sentence therein [Liddy: Abstract]. In particular, Liddy discloses the added feature of generating a topic vector comprising a list of several potential matches for a word (e.g., subject code vector), and refining the topic vector by comparing the topic vector with other topic vectors for a predetermined time interval or number of characters to determine if they share a similar context or one or more key topics [Liddy: Abstract] [Figure 1] [col 6, L30-44] [Figs. 1-4 & 10-11].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Bode and Beck with the above additional feature of the system, as disclosed by Liddy, for the motivation of providing a system for natural language processing which accounts for lexical ambiguity and for automatic classification and retrieval of documents by their general subject content with statistically guided word sense disambiguation [Liddy: col 1, L5-10].

### ***Conclusion***

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified

citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/

Glenford Madamba  
Examiner

Application/Control Number: 10/736,848

Page 20

Art Unit: 2451

Supervisory Patent Examiner, Art Unit 2451

Art Unit 2451